

CARBOHYDRATE RESEARCH, VOL. 194 (1989)

AUTHOR INDEX

- AMBROSI, H.-D., 87
ANDREWS, M. A., 1
ANGYAL, S. J., 21
ARIGA, H., 280
AZUMA, I., 199

BAAS, J. M. A., 296
BANASZEK, A., 31
BELLER, M., 145
BREWER, C. F., 139
BRIMACOMBE, J. S., c4
BRISSON, J.-R., 321

CHESTER, T. L., 273
CHRISTIAN, R., 49, c15
CHŪJŌ, R., c8
CLAESSON, A., 209
COTERON, J.-M., 163
CRAIG, D. C., 21

DAIS, P., 288
DOBASHI, K., 315

EIFUKU, H., 247

FISCHER, R., 145
FUJIHARA, M., 315

GÁCS-BAITZ, E., 305
GLAUDEMANS, C. P. J., 185
GLUZINSKI, P., 31

HAHN, C. S., c1
HARANGI, J., 300
HASEGAWA, A., 199
HAYASHIDA, M., 233
HEHRE, E. J., 139
HERNANDEZ MATEO, F., 171
HORVÁTH, K., 305

IMAI, Y., 199
INOUE, M., 247
INOUE, Y., c8
INSTITÓRIS, L., 305
ISHIDA, H., 199

JENNINGS, H. J., 321
JIMENEZ BARBERO, J., 163

KANDA, Y., c8
KASUMI, T., 139
KELLOGG, R. M., 71, 79
KIEBOOM, A. P. G., 296
KIM, J. H., c1
KIM, K. S., c1
KIM, Y. K., c1
KISO, M., 199
KOSMA, P., 145
KOVÁČ, P., 185
KRAJEWSKI, J. W., 31
KUCZEK, M., 63
KUSZMANN, J., 21
KUZUHARA, H., 223, 233

LAURENT, D., 145
LIS, T., 63
LÖGERS, M., 145
LOPEZ APARICIO, F. J. 171

MÁK, M., 300
MARTIN-LOMAS, M., 163, 308
MCDONALD, G., c4
MICHALIK, M., 87
MICHON, F., 321
MILJKOVIĆ, D., 300
MOLIN, H., 209

NAGUMO, T., 315
NAKAHARA, Y., 95
NAKANO, M., 139
NARISADA, M., 125
NIEMALÄ, K., 37
NISHIMURA, S.-I., 223
NISHINO, T., 315
NONO, I., 261
NORÈN, J.-O., 209

OGAWA, S., 115
OGAWA, T., 95
OGAWA, Y., 199
OHNO, N., 261
ORIARA, M., 115
OWENS, G. D., 273

PARK, Y. S., c1
PENADES, S., 163, 308
PERLIN, A. S., 288

- PESEKE, K., 87
POPSARIN, M., 300
POPSARIN, V., 300
POZSGAY, V., 321
PINKSTON, J. D., 273
- SAKAIRI, N., 233
SAKAMOTO, T., 280
SAKURAI, T., 199
SANTOYO GONZALEZ, F., 171
SATO, S., 247
SCHREINER, E., 49, c15
SCHULZ, G., 49, 145
SHIMAHARA, K., 223
STRAATHOF, A. J. J., 296
SUGAWARA, T., 125
- TAKIGUCHI, Y., 223
TIETZE, L. F., 155
- UNGER, F. M., 145
URASHIMA, T., 280
URBAŃCZYK-LIPKOWSKA, Z., 31
- VAN BOLHUIS, F., 79
VAN DOREN, H. A., 71, 79
VAN ESTRİK, A., 296
VAN DER GEEST, R., 71, 79
VAN DE GRAAF, B., 296
VICENT, C., 163, 308
VUKOJEVIĆ, N., 300
- WALDSTÄTTEN, P., 145
WEICHSEL, A., 63
WYNBERG, H., 71, 79
- YADOMAE, T., 261
YAMAMOTO, Y., c8
YAJIMA, M., 233
YAKUSHIJI, T., 247
YOSHIMITSU-NARITA, A., 247
- ZBIRAL, E., 49, c15
ZIEGLER, T., 185

CARBOHYDRATE RESEARCH, VOL. 194 (1989)

SUBJECT INDEX

- Acetamido-4-deoxy analogue of *N*-acetylneuraminic acid and its behaviour towards CMP-sialate synthase, synthesis of the, c15
- Acetylneuraminic acid and its behaviour towards CMP-sialate synthase, synthesis of the 4-acetamido-4-deoxy analogue of, c15
- N*-Acetylneuraminic acid, 7-, 8-, 9-deoxy-, and 7,9-dideoxy-, side chain conformation of, 49
- 3-Alkoxy-carbonyl-3-*C*-cyano-3-deoxyglycosides, synthesis of some, by the reaction of 1,5-dialdehydes with cyanoesters, 171
- (\pm)-3-Amino-2,4-dihydroxy-6-hydroxymethyl-8-oxabicyclo[3.2.1]octane derivatives, synthesis of, and migration of anhydro rings in, 115
- Analysis, capillary gas-chromatographic, of monosaccharides, 1
- 1,6-Anhydro- β -D-glucopyranose, MM2 calculation of the chair-boat equilibrium of, 296
- Assymmetric induction in the catalytic osmylation of some α,β -unsaturated octuronic acid derivatives, double, c4
- Blood-anticoagulant polysaccharides from *Hizikia fusiforme*, 315
- Branched-chain furanoses by free radical-mediated cyclization, synthesis of C-4, c1
- Bromoacetylation of alkyl hexopyranosides selectively at position 6, 185
- MM2 Calculation of the chair-boat equilibrium of 1,6-anhydro- β -D-glucopyranose, 296
- Capillary gas-chromatographic analysis of monosaccharides: improvements and comparisons using trifluoroacetylation and trimethylsilylation of sugar *O*-benzyl- and *O*-methyl-oximes, 1
- Chain-elongation reaction, syntheses of higher sugars by a new, 87
- Chair-boat equilibrium of 1,6-anhydro- β -D-glucopyranose, MM2 calculation of the, 296
- Chemical combination of 6-deoxy-6-(mycoloylamino)- α,α -trehalose and *N*-acetyl-6-*O*-(aminoacyl)muramoyl dipeptide, 199
- Chitin, specific degradations of, for preparation of peracetylated chitobiose, 223
- Chitobiose, peracetylated, preparation by specific degradations of chitin, and chemical manipulations, 223
- Composition and conformation of D-threo-3,4-hexodiulose in solution, and the X-ray crystal structure of its $\beta\beta$ anomer, 21
- Conformational investigations of methyl 2,3-anhydro-2,3,4-trideoxy- β -D-lyxo-hexopyranoside, X-ray and, 31
- Conversion of sugar dithioacetals into the corresponding dimethyl acetals by *N*-bromosuccinimide-methanol, a mild and rapid, 300
- Crystal and molecular structure of phosphoenolpyruvic acid, 63
- Crystal structure of heptyl 1-thio- α -D-glucopyranoside, a member of a new homologous series of mesogenic carbohydrate derivatives, 79
- Cyanoethylidene derivatives in glycosylation reactions, different reactivities of acetylated *exo*- and *endo*-, 163
- Decagalacturonic acid, a stereocontrolled synthesis of the propyl glycoside of a, 95
- Deoxy derivatives (7-, 8-, 9-, and 4,7-) of *N*-acetylneuraminic acid, side-chain conformation of, 49
- 5-Deoxy-Kdo, synthesis of poly(acrylamide) copolymers containing residues of, 145
- 1,1-Dialkyl-1-methoxymethyl glucosides (acetal-glucosides), stereoselective synthesis of, 155
- 1,6-Dibromo-1,6-dideoxygalactitol (Mitolactol), a kinetic study of the solvolysis of, 305
- Dibutylstannylene-mediated alkylation of α,α -trehalose derivatives, the regioselectivity of the, 308
- Different reactivities of acetylated *exo*- and *endo*-cyanoethylidene derivatives in glycosylation reactions, 163
- Dihydroacarbose, an α -D-glucosidase inhibitor having a pseudo-tetrasaccharide structure, synthesis of, 233
- Dimethyl acetals, conversion of sugar dithioacetals into the corresponding, using *N*-bromosuccinimide-methanol, 300
- Dipeptide, an *N*-acetyl-6-*O*-(aminoacyl)muramoyl, chemical combination of, with 6-deoxy-6-(mycoloylamino), α,α -trehalose, 199
- Efficient, stereoselective synthesis of 4-*E*- and 4-*Z*-D-erythro-sphingene and related compounds from 2-amino-2-deoxy-D-glucose, an, 125
- Enzymic and physicochemical properties of an *exo*-(1 \rightarrow 3)- β -D-glucanase from *Rhizoctonia solani*, 261
- Exo*-(1 \rightarrow 3)- β -D-glucanase from *Rhizoctonia solani*, enzymic and physicochemical properties of an, 261

- Fluid chromatography and supercritical fluid chromatography-mass spectrometry, separation of malto-oligosaccharide derivatives by capillary supercritical, 273
- Free radical-mediated cyclization, synthesis of C-4 branched chain furanoses by, C1
- Fucose-containing sulfated polysaccharides from *Hizikia fusiforme*, 315
- O*- α -D-Galactopyranosylsaccharinic acids, identification by mass spectrometry of trimethylsilyl derivatives, 37
- D-Glucans of oral *Streptococcus salivarius*, production and partial characterization of, 247
- α -D-Glucosidase inhibitor, dihydroacarbose, having a pseudo-tetrasaccharide structure, synthesis of, 233
- Glucosides (acetal-glucosides), stereoselective synthesis of 1,1-dialkyl-1-methoxymethyl, 155
- Glycosylation reactions, different reactivities of acetylated *exo*- and *endo*-cyanoethylidene derivatives in, 163
- Heptyl 1-thio- α -D-glucopyranoside, the crystal structure of, a member of a new homologous series of mesogenic carbohydrate derivatives, 79
- D-*threo*-3,4-Hexodiulose, the composition and conformation of, in solution, and the X-ray crystal structure of its $\beta\beta$ anomer, 21
- Hexopyranosides, selective bromoacetylation at position 6, 185
- Higher sugars, syntheses of, by a new chain-elongation reaction, 87
- Horse colostrum, structure determination of three neutral oligosaccharides from, 280
- Host-guest geometrical relationship in a branched cyclomaltohexaose inclusion-complex, C8
- Identification of *O*- α -D-galactopyranosylsaccharinic acids as their trimethylsilyl derivatives by mass spectrometry, 37
- Kinetic study of the solvolysis of 1,6-dibromo-1,6-dideoxygalactitol (Mitolactol), a, 305
- Liquid crystalline properties of the *N*-alkyl 1-thio- α -D-glucopyranosides, synthesis and, 71
- Malto-oligosaccharide derivatives by capillary supercritical fluid chromatography and supercritical fluid chromatography-mass spectrometry, separation of, 273
- Mass spectrometry of trimethylsilyl derivatives, identification of *O*- α -D-galactopyranosylsaccharinic acids by, 37
- Mesogenic carbohydrate derivatives, the crystal structure of heptyl 1-thio- α -D-glucopyranoside as a member of a new homologous series of, 79
- Methyl 2,3-anhydro-2,3,4-trideoxy- β -D-*lyxo*-hexopyranoside, X-ray and conformational investigations of, 31
- Methyl glucosides, a ^{13}C spin-lattice relaxation study of solvent effects on the rotational dynamics of, 288
- Migration of anhydro rings in (\pm)-3-amino-2,4-dihydroxy-6-hydroxymethyl-8-oxabicyclo-[3.2.1]octane derivatives, 115
- Nariginase, from *Penicillium decumbens*, substrate specificity of the α -L-rhamnosidase component, 321
- Neuraminic acid, *N*-acetyl- 7-, 8-, 9-deoxy-, and 7,9-dideoxy, side-chain conformation of, 49
- Nuclear Overhauser effects in the rotating frame of a host-guest geometrical relationship, C8
- D-*arabino*-Octulopyranosylonic acid, 3,5-dideoxy-, synthesis of poly(acrylamide) copolymers containing residues of, 145
- Octulosonic acid, studies of the synthesis of sugar phosphonates related to 3-deoxy-D-*manno*-2-, 209
- Octuronic acid derivatives, double asymmetric induction in the catalytic osmylation of some α,β -unsaturated, C4
- Oligosaccharides, intermediates for the synthesis of (1 \rightarrow 6)-linked, preparation via selective bromoacetylation of hexopyranosides, 185
- Oligosaccharides, neutral, from horse colostrum, structure determination of three, 280
- Osmylation of some α,β -unsaturated octuronic acid derivatives, double asymmetric induction in the catalytic, C4
- Oximes, *O*-benzyl- and *O*-methyl-, of sugars, use of trifluoroacetylation and trimethylsilylation of, for improvement and comparisons in capillary gas-chromatographic analysis of monosaccharides, 1
- Peracetylated chitobiose: preparation by specific degradations of chitin, and chemical manipulations, 223
- Phosphoenolpyruvic acid, the crystal and molecular structure of, 63
- Poly(acrylamide) copolymers containing 5-deoxy-Kdo residues, synthesis of, 145
- Polysaccharides from oral *Streptococcus salivarius*, production and partial characterization of, 247

- Propyl glycoside of a decagalacturonic acid, stereocontrolled synthesis of the, 95
- Reaction of 1,5-dialdehydes with cyanoesters, synthesis of some 3-alkoxycarbonyl-3-C-cyano-3-deoxyglycosides by the, 171
- Regioselectivity of the dibutylstannylene-mediated alkylation of α,α -trehalose derivatives, 308
- α -L-Rhamnosidase from *Penicillium decumbens*, substrate specificity, 321
- Rhizoctonia solani*, enzymic and physicochemical properties of an exo-(1 \rightarrow 3)- β -D-glucanase from, 261
- Rotational dynamics of methyl glucosides, a ^{13}C spin-lattice relaxation study of solvent effects on the, 288
- Selective bromoacetylation of alkyl hexopyranosides at position 6, 185
- Separation of malto-oligosaccharide derivatives by capillary supercritical fluid chromatography and supercritical fluid chromatography-mass spectrometry, 273
- Sialic acid synthase, CMP-, effect of side-chain conformation of deoxy derivatives of *N*-acetylneuraminic acid on, 49
- Solvolysis of 1,6-dibromo-1,6-dideoxygalactitol (Mitolactol), a kinetic study of the, 305
- 4-*Z*-D-erythro-Sphingenine and related compounds from 2-amino-2-deoxy-D-glucose, an efficient, stereoselective synthesis of 4-*E*- and, 125
- ^{13}C Spin-lattice relaxation study of solvent effects on the rotational dynamics of methyl glucosides, a, 288
- Stereocontrolled synthesis of the propyl glycoside of a decagalacturonic acid, as a model compound for the endogenous phytoalexin elicito-active oligogalacturonic acids, 95
- Stereoselective synthesis of 1,1-dialkyl-1-methoxymethyl glucosides (acetal-glucosides), 155
- Steric course of the hydrolysis of α,α -trehalose and α -D-glucosyl fluoride by pig kidney trehalase, 139
- Streptococcus salivarius*, oral, production and partial characterization of D-glucans of, 247
- Structure of phosphoenolpyruvic acid, the crystal and molecular, 63
- Sugar dithioacetals, conversion into the corresponding dimethyl acetals using *N*-bromosuccinimide-methanol, 300
- Sugar phosphonates related to 3-deoxy-D-manno-2-octulosonic acid (Kdo), studies of the synthesis of, 209
- Sulfated, fucose-containing polysaccharides from *Hizikia fusiforme*, 315
- Syntheses of higher sugars by a new chain-elongation reaction, 87
- Synthesis and liquid crystalline properties of the *N*-alkyl 1-thio- α -D-glucopyranosides, a new homologous series of carbohydrate mesogens, 71
- Synthesis of (\pm)-3-amino-2,4-dihydroxy-6-hydroxymethyl-8-oxabicyclo[3.2.1]octane derivatives, and their anhydro-ring-migration, 115
- Synthesis of "dihydroacarbose", an α -D-glucosidase inhibitor having a pseudo-tetrasaccharide structure, 233
- Synthesis of 4-*E*- and 4-*Z*-D-erythro-sphingenine and related compounds from 2-amino-2-deoxy-D-glucose, an efficient, stereoselective, 125
- Synthesis of C-4 branched-chain furanoses by free radical-mediated cyclization, C1
- Synthesis of some 3-alkoxycarbonyl-3-C-cyano-3-deoxyglycosides by the reaction of 1,5-dialdehydes with cyanoesters, 171
- Synthesis of sugar phosphonates related to 3-deoxy-D-manno-2-octulosonic acid, 209
- Synthesis of the 4-acetamido-4-deoxy analogue of *N*-acetylneuraminic acid and its behaviour towards CMP-sialate synthase, C15
- 1-Thio- α -D-glucopyranosides, synthesis and liquid crystalline properties of the *n*-alkyl, 71
- Trehalase, steric course of the hydrolysis of α,α -trehalose and α -D-glucosyl fluoride catalyzed by pig kidney, 139
- α,α -Trehalose and α -D-glucosyl fluoride catalyzed by pig kidney trehalase, 139
- α,α -Trehalose, 6-deoxy-6-(mycoloylamino)-chemical combination with *N*-acetyl-6-*O*-(aminoacyl)muramoyl dipeptide, 199
- α,α -Trehalose derivatives, the regioselectivity of the dibutylstannylene-mediated alkylation of, 308
- X-Ray and conformational investigations of methyl 2,3-anhydro-2,3,4-trideoxy- β -D-lyxohexopyranoside, 31



